

# AIP SUPPLEMENT MALAYSIA

PHONE: 6-03-8871 4000  
FAX: 6-03-8881 0530  
AFTN: WMKKYAYS

AERONAUTICAL INFORMATION SERVICES  
DEPARTMENT OF CIVIL AVIATION  
NO. 27, PERSIARAN PERDANA  
LEVEL 1-4, PODIUM BLOCK, PRECINCT 4,  
62618 PUTRAJAYA,  
MALAYSIA

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**AIRAC**

## KUALA LUMPUR FLIGHT INFORMATION REGION

### KL INTERNATIONAL / SEPANG AIRPORT IMPLEMENTATION OF NEW ILS RWY 14L AND RWY 32R OPERATIONS

#### 1 INTRODUCTION

- 1.1 The purpose of this AIP Supplement is to notify the aviation industry of the new ILS RWY 14L and ILS RWY 32R for CAT I and CAT II has been installed at KL International Airport.
- 1.2 The ILS CAT I for both runway 14L and 32R will be available on 15 October 2015 whilst ILS CAT II for both runway 14L and 32R are expected operations in November 2015 and will be activated by NOTAM.
- 1.3 This AIP Supplement supersedes any and all those information previously published in AIP Supplement 10/2014 with regards to operations of ILS RWY 14L and ILS RWY 32R.

#### 2 NEW DATA

- 2.1 Revised aerodrome obstacle with regards to new ILS facilities.

#### WMKK AD 2.10 AERODROME OBSTACLES

In APCH/TKOF areas			In circling area and at aerodrome		Remarks
1			2		3
RWY and area affected	Obstacle type Elevation Markings and Lights	Coordinates WGS84	Obstacle type Elevation Markings and Lights	Coordinates WGS84	
a	b	c	d	e	
14L/APCH 32R/TKOF	LOC antennas 19.23m Red/Red obstruction lights	02 46 48.72 N 101 42 02.51 E	GP aerial 29.60m Red/White obstruction lights	02 46 36.47 N 101 42 15.18 E	NIL
32R/APCH 14L/TKOF	LOC antennas 25.02m Red/Red obstruction lights	02 44 44.99 N 101 43 25.57 E	GP aerial 33.21m Red/White obstruction lights	02 45 04.87 N 101 43 16.64 E	NIL

**WMKK AD 2.19 RADIO NAVIGATION AND LANDING AIDS**

Type of aid CAT of ILS	ID	Frequency	Hour of operation	Site TX antenna coordinates	Elevation of DME transmitting antenna	Remarks
1	2	3	4	5	6	7
ILS CAT II	IEL	108.50 MHz	H24	GP: 02 46 36.47 N 101 42 15.18 E  LOC: 02 44 44.99 N 101 43 25.57 E	-	14L
DME	IEL	CH 22X		02 46 36.47 N 101 42 15.18 E	19.8M	14L
ILS CAT II	IER	109.10 MHz		GP: 02 45 04.87 N 101 43 16.64 E  LOC: 02 46 48.72 N 101 42 02.51 E	-	32R
DME	IER	CH 28X		02 45 04.87 N 101 43 16.64 E	23.41M	32R

**3 INSTRUMENT FLIGHT PROCEDURES**

3.1 Instrument Approach charts and the associated charts corresponding to the new ILS procedures are as follows:

3.2 Aerodrome Obstacle Chart Type A - RWY 14L/32R. **See Appendix A1.**

**3.3 RWY 14L:**

3.3.1 Precision Approach Terrain Chart RWY 14L. **See Appendix A2.**

3.3.2 ILS or LOC RWY 14L. **See Appendix A4.**

**3.4 RWY 32R:**

3.4.1 Precision Approach Terrain Chart RWY 32R. **See Appendix A3.**

3.4.2 ILS or LOC RWY 32R. **See Appendix A5.**

**4 IMPLEMENTATION DATE**

- 4.1 This AIP Supplement and the relevant charts will become effective at 0001UTC on 15 October 2015. A trigger NOTAM will be issued to alert users on the implementation of the ILS CAT I and CAT II for RWY 14L and RWY 32R procedures.

**5 CANCELLATION**

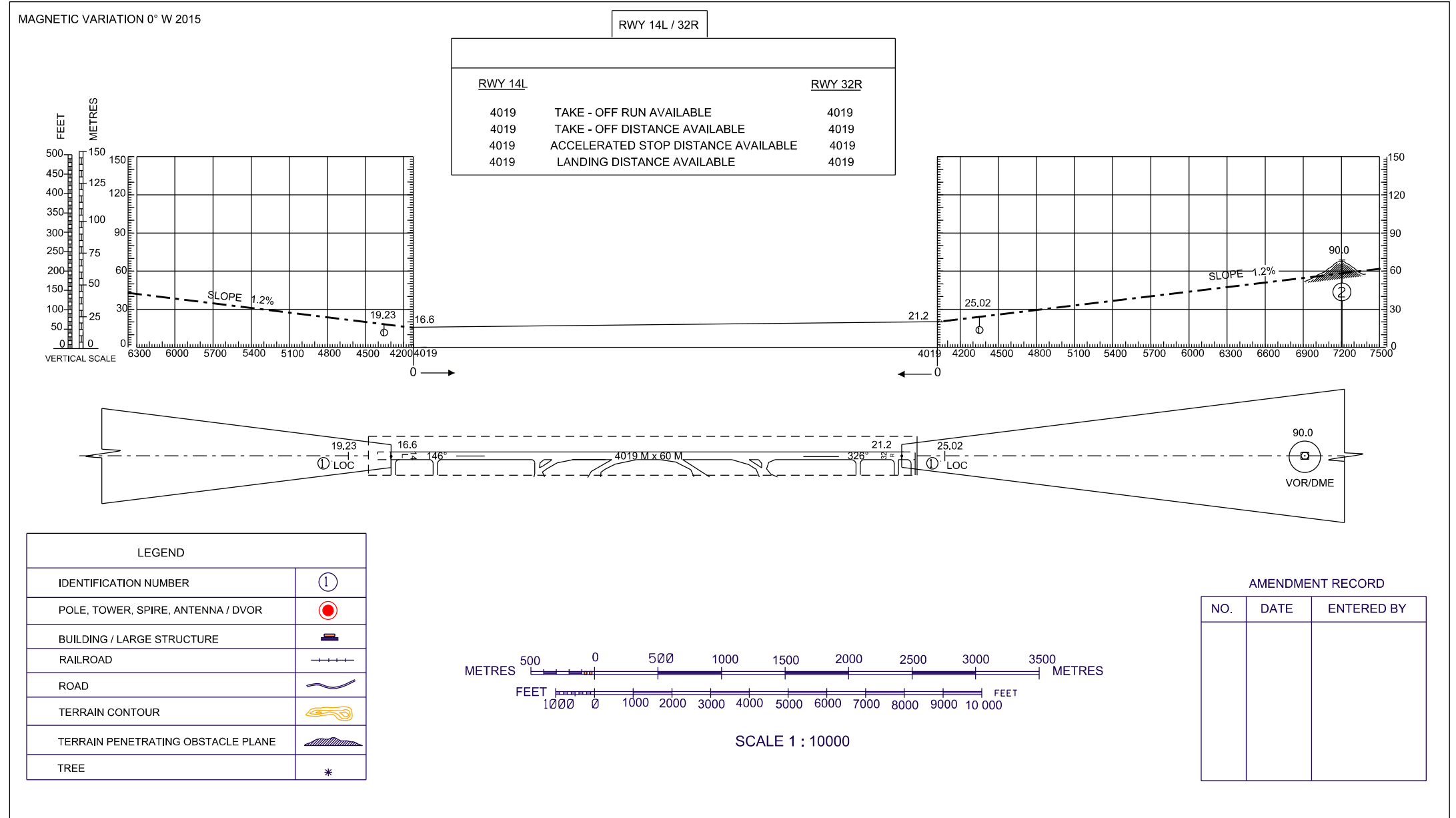
- 5.1 This AIP Supplement will remain current until the information is published in AIP Malaysia.

**DATO' SRI AZHARUDDIN ABDUL RAHMAN**  
**Director General**  
**Department of Civil Aviation**  
**Malaysia**

# AERODROME OBSTACLE CHART - ICAO TYPE A ( OPERATING LIMITATIONS )

**SEPANG (WMKK)**  
KL INTERNATIONAL AIRPORT  
RUNWAY 14L/32R

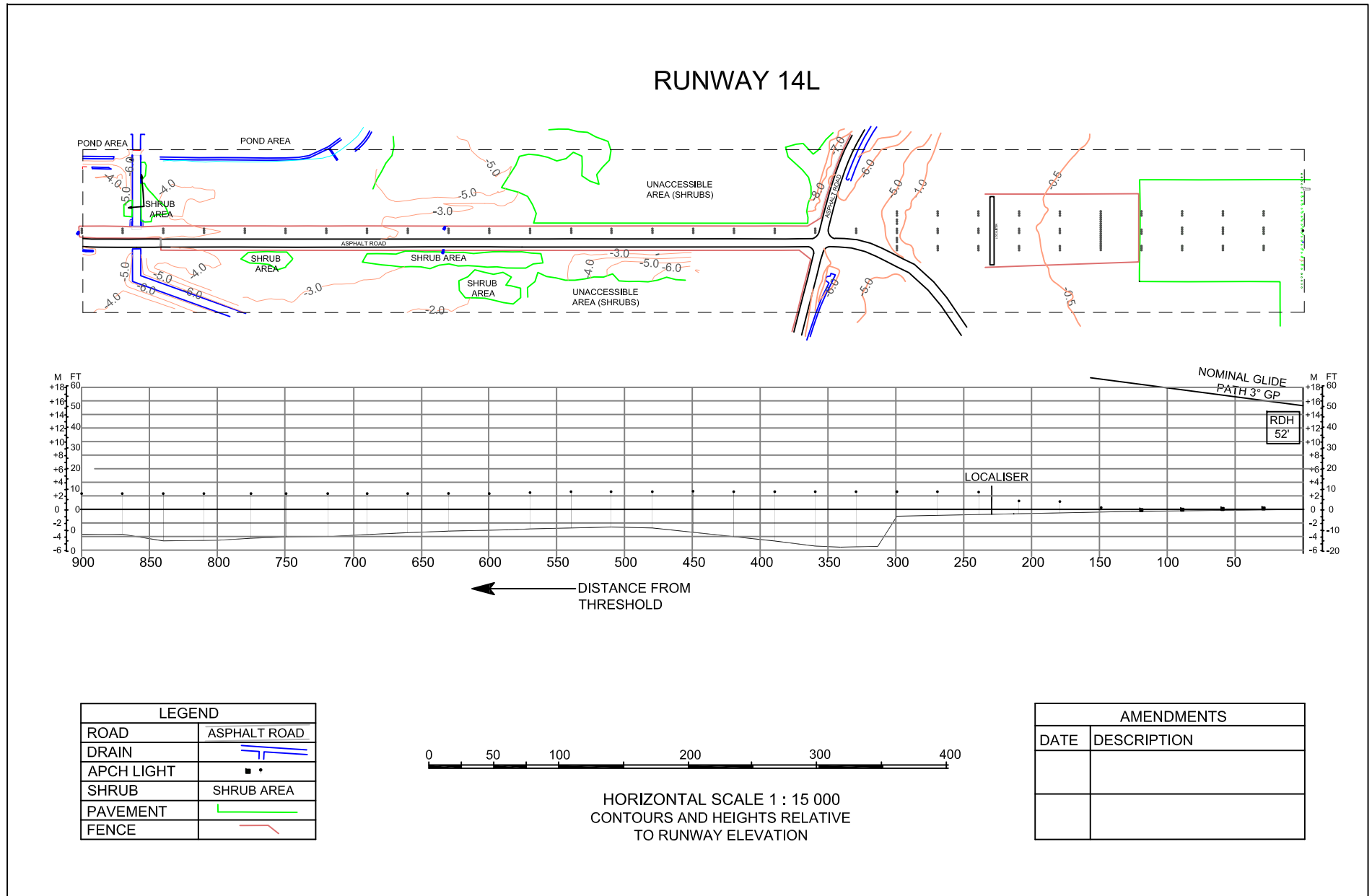
DIMENSIONS AND ELEVATION IN METERS



DISTANCES IN METRES  
HEIGHTS IN FEET AND METRES

PRECISION APPROACH TERRAIN - ICAO

KL INTERNATIONAL AIRPORT,  
SELANG

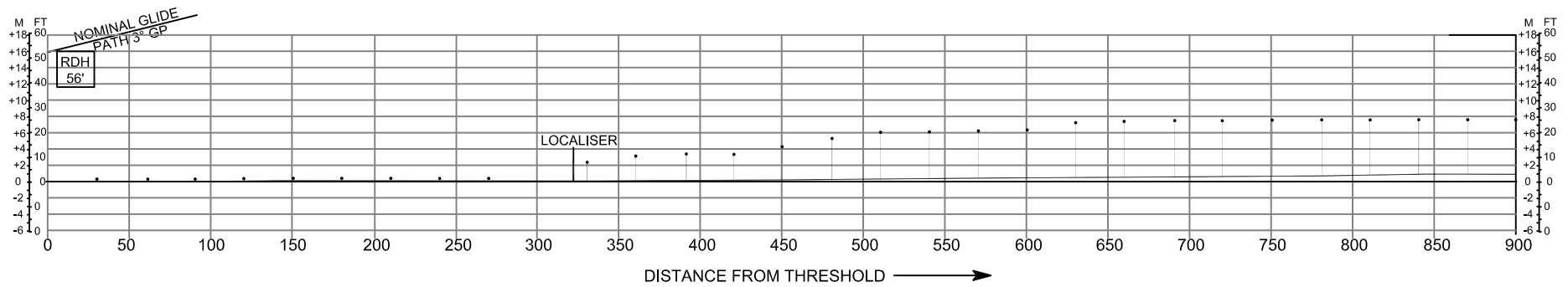
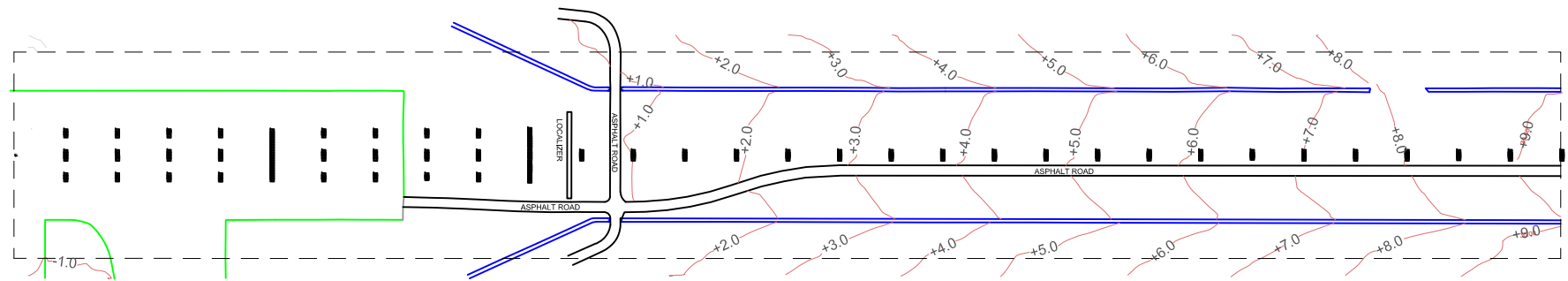


DISTANCES IN METRES  
HEIGHTS IN FEET AND METRES

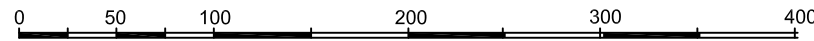
PRECISION APPROACH TERRAIN - ICAO

KL INTERNATIONAL AIRPORT,  
SEPANG

RUNWAY 32R



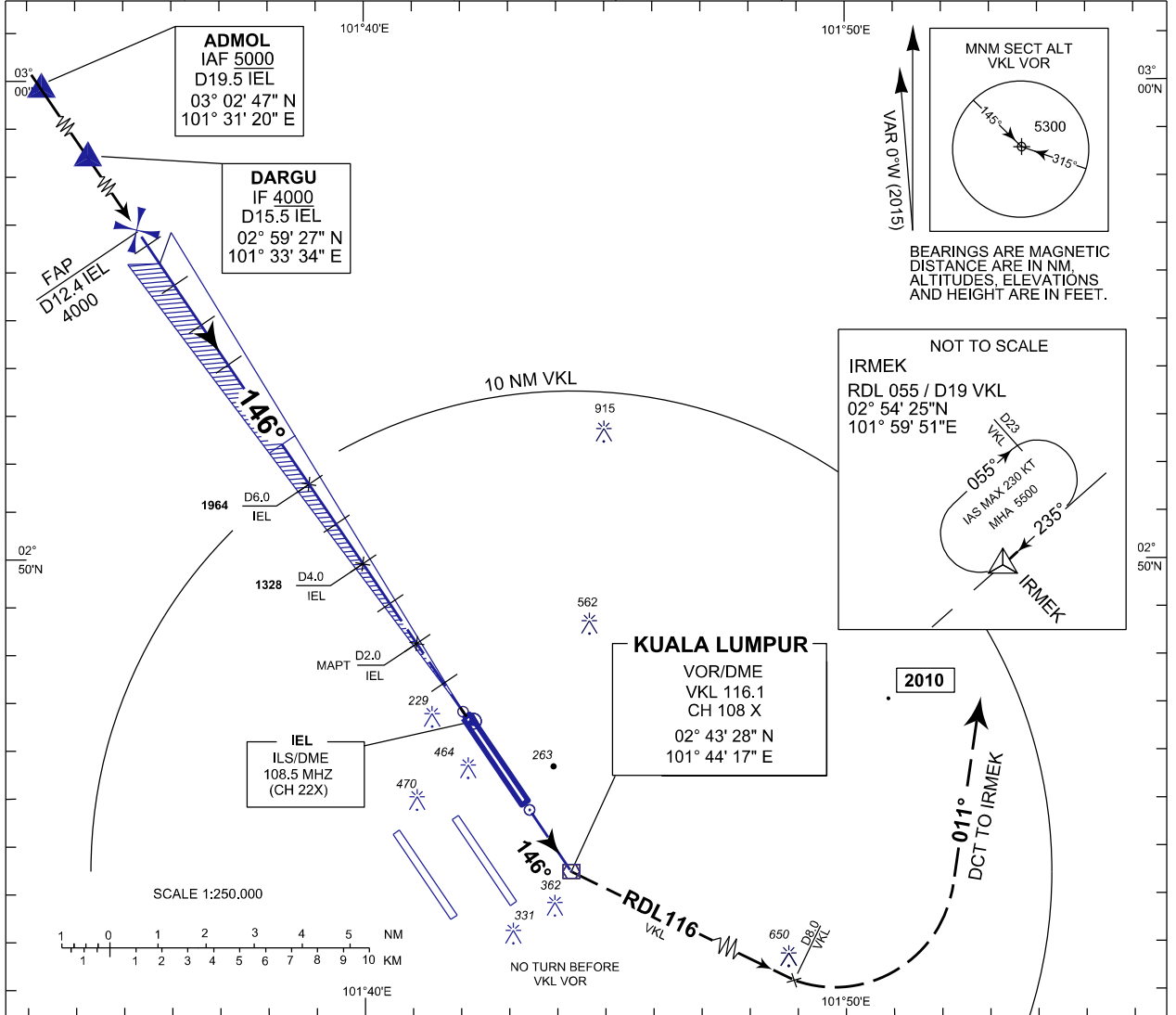
LEGEND	
ROAD	ASPHALT ROAD
DRAIN	
APCH LIGHT	■ •
SHRUB	SHRUB AREA
PAVEMENT	
FENCE	



HORIZONTAL SCALE 1 : 15 000  
CONTOURS AND HEIGHTS RELATIVE  
TO RUNWAY ELEVATION

AMENDMENTS	
DATE	DESCRIPTION

INSTRUMENT APPROACH CHART - ICAO	AD ELEV 70 HEIGHT RELATED TO THR ELEV RWY 14 L - 55FT	FREQUENCIES		SEPANG (WMKK) KL INTERNATIONAL AIRPORT
		APP 118.650 135.750 120.350	TWR 118.800 GND 121.650 ATIS 128.050	

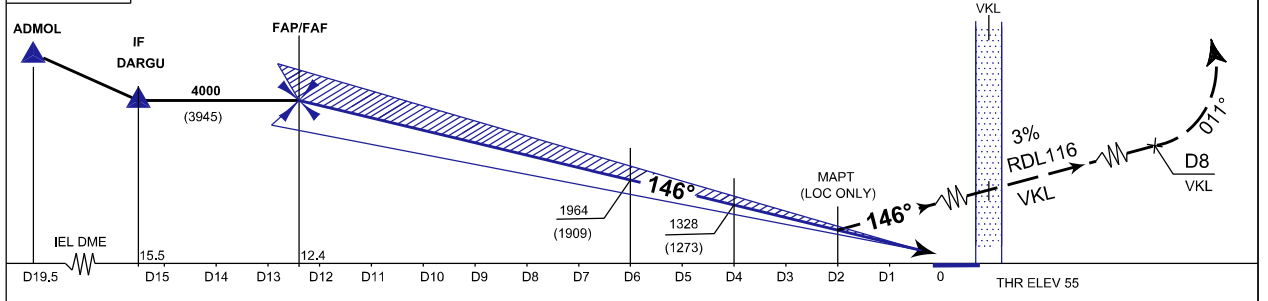


ILS RDH 52FT

GP 3.0°

LOC 5.2%

**MISSED APPROACH :** TRACK 146° TO VKL VOR, CLIMB TO 5500 FT. THEN TRACK ON RDL 116 (TRACK 116°).  
AT D8 VKL DME TURN LEFT TRACK 011° DIRECT TO IRMEK HOLDING PATTERN OR AS DIRECTED BY ATC.  
NOTE : MISSED APPROACH GRADIENT 3%.



OCA (OCH)		A	B	C	D	DL
STRAIGHT IN APPROACH	ILS CAT I	300 (245)				
	ILS CAT II	206 (151)				
	LOC	690 (635)				
(*) CIRCLING		770 (700)		1260 (1190)		

ALTITUDE / HEIGHT ON FINAL APPROACH					
DME DIST IEL			13	12.4	12
ALTITUDE (HGT)			4000(3945)	4000(3945)	3872(3817)
DME DIST			9	8	7
ALTITUDE (HGT)	3554(3499)	3236(3181)	2918(2863)	2600(2545)	2282(2227)
DME DIST	6	5	4	3	2
ALTITUDE (HGT)	1964(1909)	1646(1591)	1328(1273)	1010(955)	692(637)

(\*) CIRCLING NOT PERMITTED WEST OF RWY 14L/32R CENTERLINE, EXCEPT WHEN AUTHORIZED BY ATC

### SEPANG/KL INTERNATIONAL AIRPORT INITIAL APPROACH SEGMENTS ILS RWY 14L

PATH TERMINATOR	WAYPOINT IDENTIFIER	FLY OVER	COURSE /TRACK °M	TURN DIRECTION	ALTITUDE	SPEED LIMIT (KT)	RECOMMENDED NAVAID	NAVIGATION SPECIFICATION	COORDINATES
IF	ADMOL	-	-	-	+5000	210	-	RNAV 1	03°02'47.01"N 101°31'19.78"E
TF	DARGU	-	146°	-	+4000	180	-	RNAV 1	02°59'27.23"N 101°33'33.93"E

#### FAP ILS RWY 14L DATA

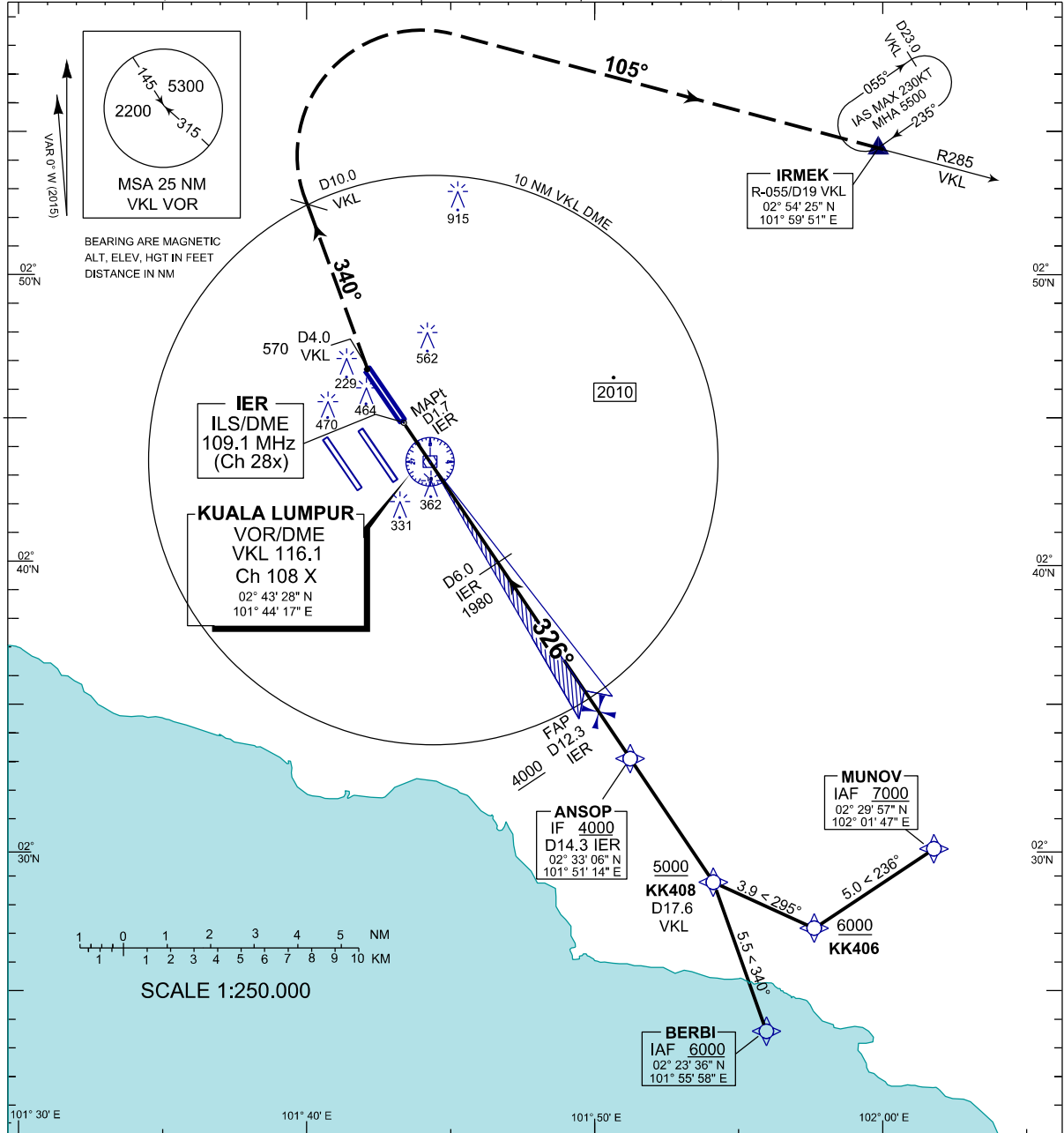
	ALTITUDE	COORDINATES
FAP 14L	4000	02°56'53.30"N 101°35'16.90"E

#### ILS OR LOC RWY 14L AERONAUTICAL DATA TABULATION

FIX / POINT	COORDINATES (WGS 84)
VKL VOR/DME	02°43'28.00"N 101°44'17.00"E
DARGU (IF) D15.5 IEL DME	02°59'27.20"N 101°33' 33.90"E
FAP/FAF D12.4 IEL DME	02°56'53.30"N 101°35'16.90"E
MAPT D2.0 IEL DME	02°48'14.40"N 101°41'05.10"E
RDL 116/D8 0 VKL VOR/DME	02°39'56.40"N 101°51'28.30"E
IRMEK (MAHF) RDL 055/D19.0 VKL VOR/DME	02°54'25.00"N 101°59'51.00"E



INSTRUMENT APPROACH CHART - ICAO	TRANSITION ALT 11000 AERODROME ELEVATION 70 HEIGHT RELATED TO THR RWY 32R - ELEVATION 70FT	FREQUENCIES		SEPANG (WMKK) KL INTERNATIONAL AIRPORT RWY 32R ILS or LOC
		APP 121.250 135.750 120.350	TWR 118.800 GND 121.650 ATIS 128.050	



ILS RDH 56FT	<b>MISSED APPROACH:</b> PROCEED ON TRACK 326°, CLIMBING TO 5500FT. AT D4 VKL DME TURN RIGHT TR 340°. AT D10 VKL DME TURN RIGHT (IAS MAX 230KT) HDG 105° DIRECT TO IRMEK HOLDING PATTERN OR AS DIRECTED BY ATC.
GP 3.0°	
LOC 5.2%	

IER DME	THR ELEV 70	1	2	3	4	5	6	7	8	9	10	11	12	13	14	
VKL DME	D10	4	3	2	1	0	1	2	3	4	5	6	7	8	9	10

STRAIGHT IN APPROACH	OCA (OCH)	A	B	C	D	DL	DME DIST	ALTITUDE (HGT)	13	12.3
	ILS CAT I	300(230)						4000(3930)	4000(3930)	
	ILS CAT II	200(130)						2928(2858)	2610(2540)	
	LOC	570(500)						702(632)	384(314)	
CIRCLING	770(700)		1260(1190)							

CIRCLING NOT PERMITTED WEST OF RWY 32R/14L CENTERLINE, EXCEPT WHEN AUTHORIZED BY ATC

**SEPANG/KL INTERNATIONAL AIRPORT  
INITIAL APPROACH SEGMENTS ILS RWY 32R - RNAV1 (GNSS)**

**INITIAL APPROACH SEGMENT FROM MUNOV**

Path Terminator	Waypoint Identifier	Fly Over	Course/Track °M	Turn Direction	Altitude	Speed Limit (kt)	Recommended Navid	Navigation Specification	Coordinates
IF	MUNOV	-	-	-	+7000	210	-	RNAV 1	02°29'57.02"N 102°01'46.90"E
TF	KK406	-	236°	-	+6000	-	-	RNAV 1	02°27'10.17"N 101°57'37.60"E
TF	KK408	-	295°	-	+5000	-	-	RNAV 1	02°28'47.09"N 101°54'07.30"E
TF	ANSOP	-	326°	-	+4000	180	-	RNAV 1	02°33'06.00"N 101°51'14.00"E

**INITIAL APPROACH SEGMENT FROM BERBI**

Path Terminator	Waypoint Identifier	Fly Over	Course/Track °M	Turn Direction	Altitude	Speed Limit (kt)	Recommended Navid	Navigation Specification	Coordinates
IF	BERBI	-	-	-	+6000	210	-	RNAV 1	02°23'35.44"N 101°55'57.71"E
TF	KK408	-	340°	-	+5000	-	-	RNAV 1	02°28'47.09"N 101°54'07.30"E
TF	ANSOP	-	326°	-	+4000	180	-	RNAV 1	02°33'06.00"N 101°51'14.00"E

**INITIAL APPROACH SEGMENT FROM BERBI**

	Altitude	Coordinates
FAP 32R	4000	02°34'46.6434"N 101°50'07.5677"E

**SEPANG/KL INTERNATIONAL AIRPORT  
ILS OR LOC RWY 32R  
AERONAUTICAL DATA TABULATION**

FIX / POINT	Coordinates (WGS 84)
<b>VKL VOR/DME</b>	02°43'28.00"N 101°44'17.00"E
<b>ANSOP (IF) D14.3 IER DME</b>	02°33'06.00"N 101°51'44.00"E
<b>FAP/FAF D12.3 IER DME</b>	02°34'46.60"N 101°50'07.60"E
<b>MAPt D1.7 IER DME</b>	02°43'37.80"N 101°44'10.50"E
INT TR 326° / D4.0 VKL	02°40'07.90"N 101°46'31.30"E
<b>IRMEK (MAHF) RDL 055 / D19.0VKL VOR DME</b>	02°54'25.00"N 101°59'51.00"E